

ELECTRONIC SUPPLEMENTARY INFORMATION

A study on the conformation-dependent colorimetric response of Polydiacetylene supramolecules to external triggers

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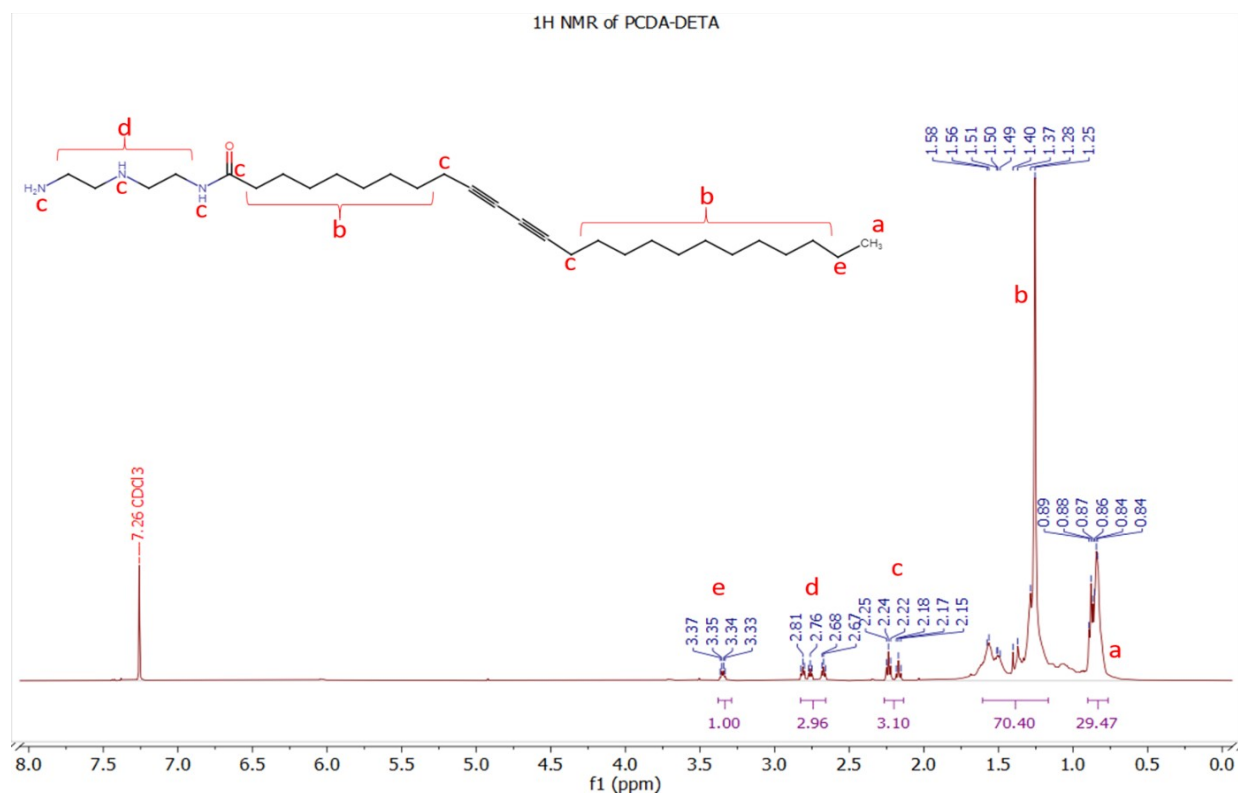


Fig. S1 ¹H NMR spectrum of PCDA-DETA

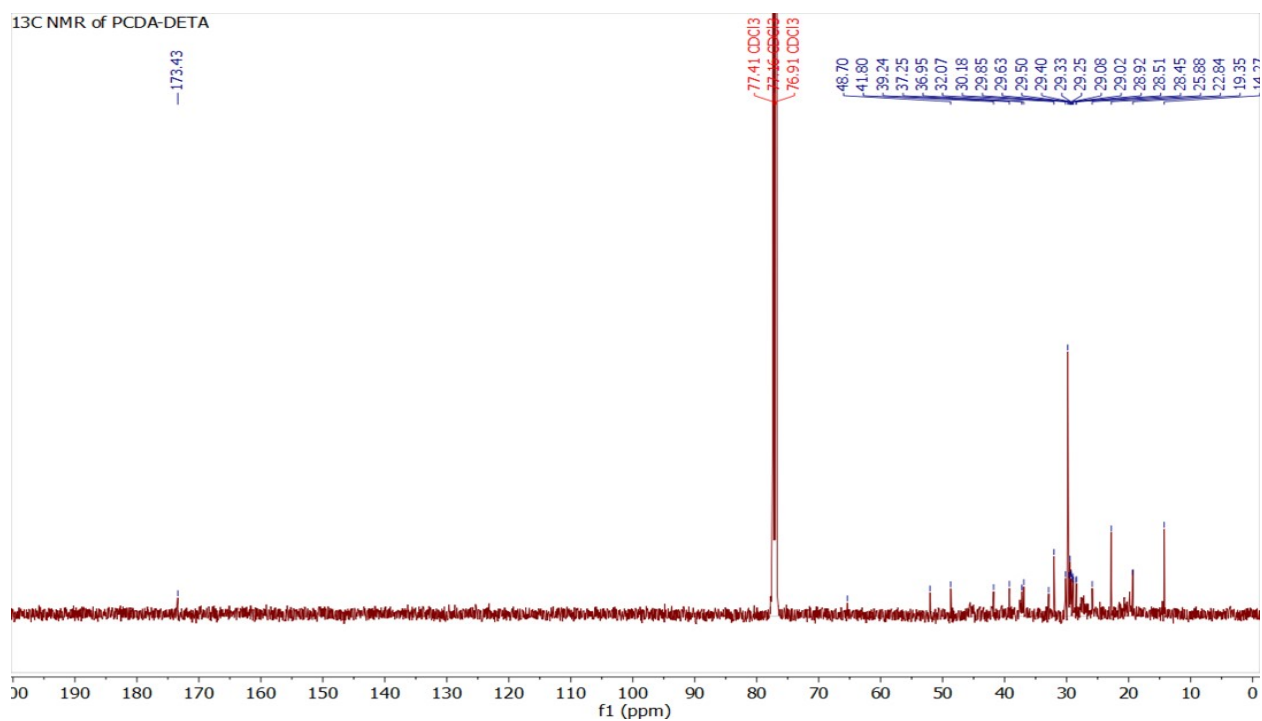


Fig. S2 ¹³C NMR spectrum of PCDA-DETA

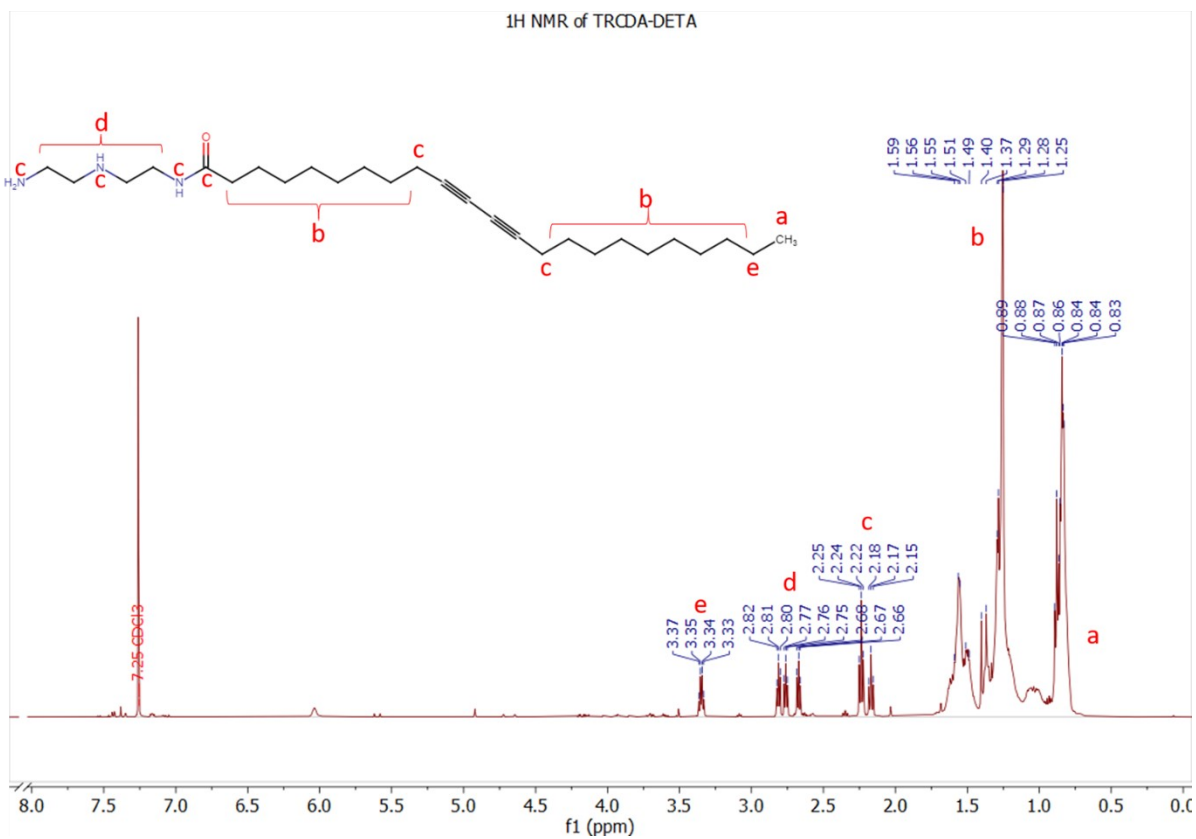


Fig. S3 ^1H NMR spectrum of TCDA-DETA

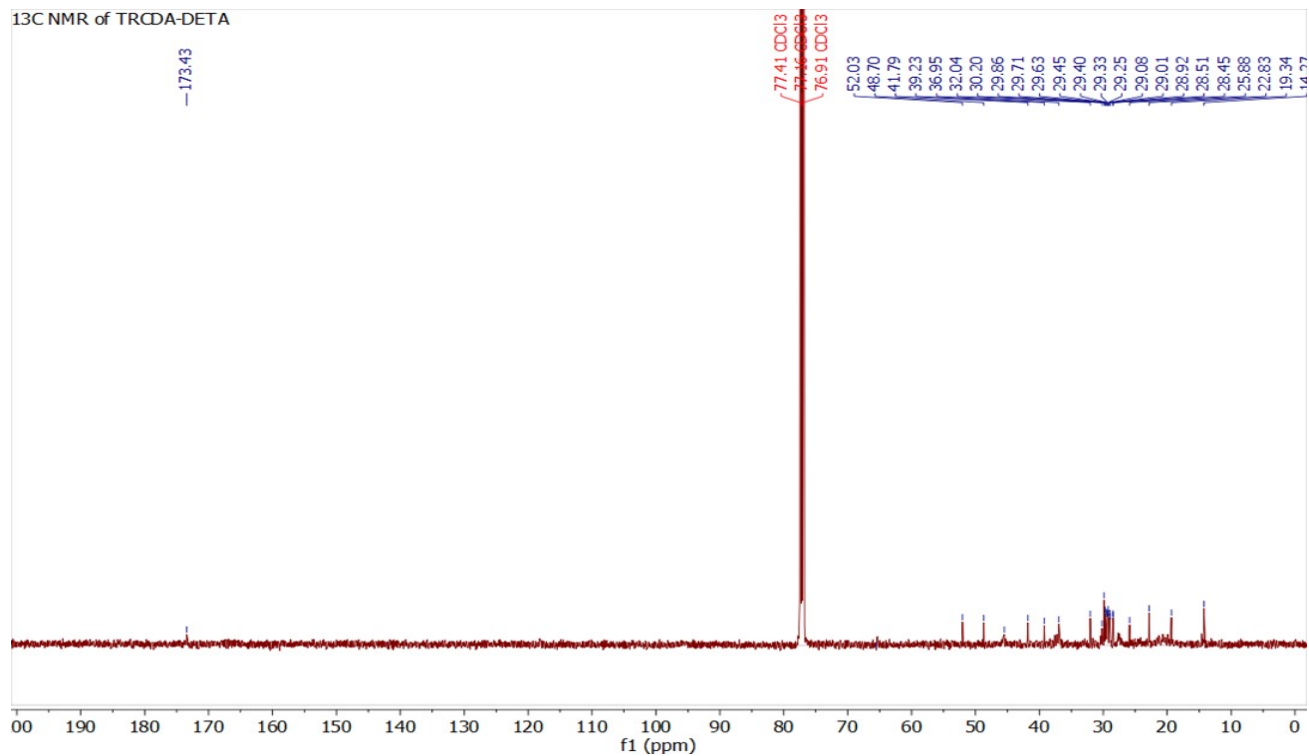


Fig. S4 ^{13}C NMR spectrum of TCDA-DETA

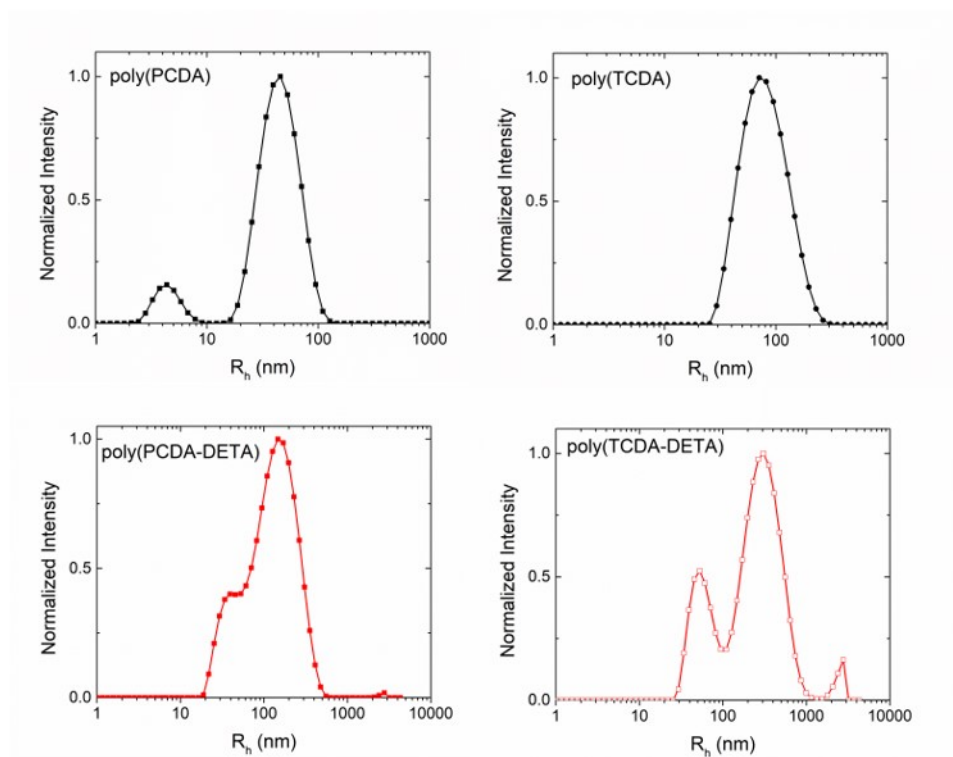


Fig. S5 Normalized intensity-weighted size distributions, displaying the hydrodynamic radii (R_h) of PDA vesicles formed by various monomers.

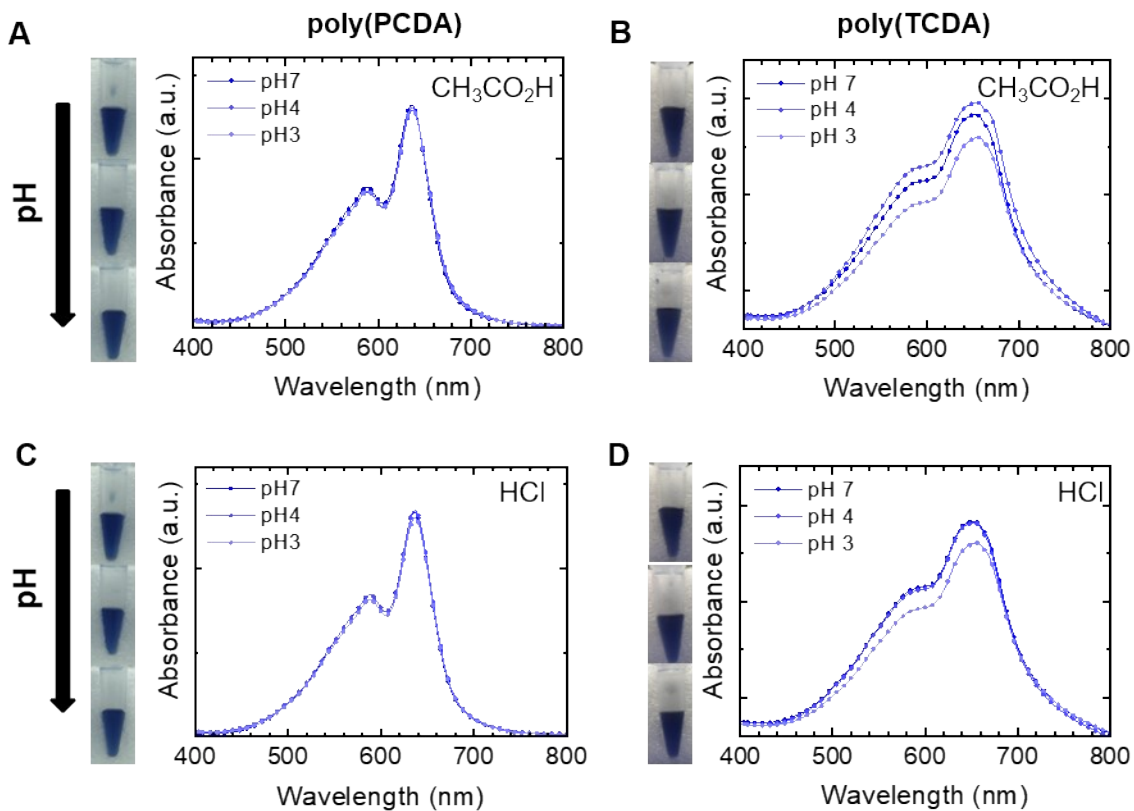


Fig. S6 UV-Vis absorption spectra and photos obtained at pH 7, 4, and 3 upon acetic acid addition to poly(PCDA) (A) and to poly(TCDA) (B); upon hydrochloric acid addition to poly(PCDA) (C) and to poly(TCDA) (D).

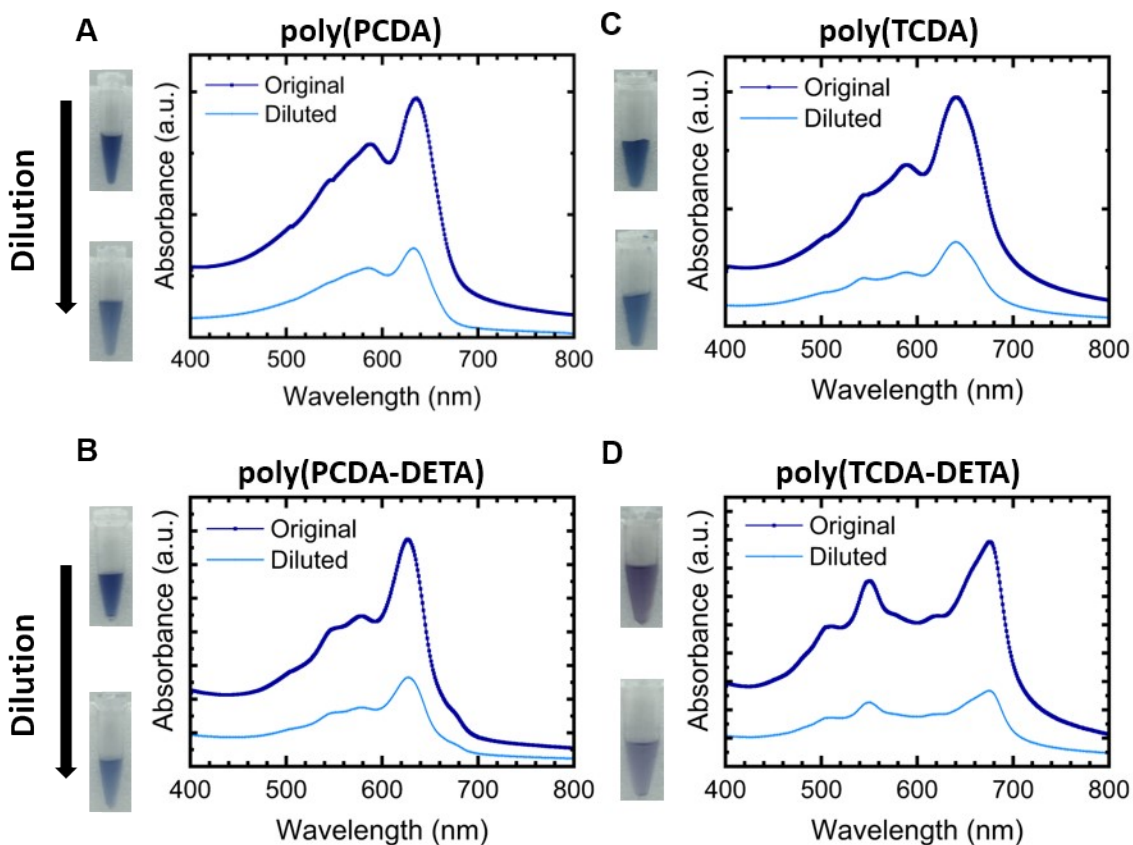


Fig. S7 UV-Vis absorption spectra and photos recorded after diluting the polymer vesicle solutions poly(PCDA) (A); poly(PCDA-DETA) (B); poly(TCDA) (C); poly(TCDA-DETA) to a final volume that increased by threefold by adding only Milli-Q.

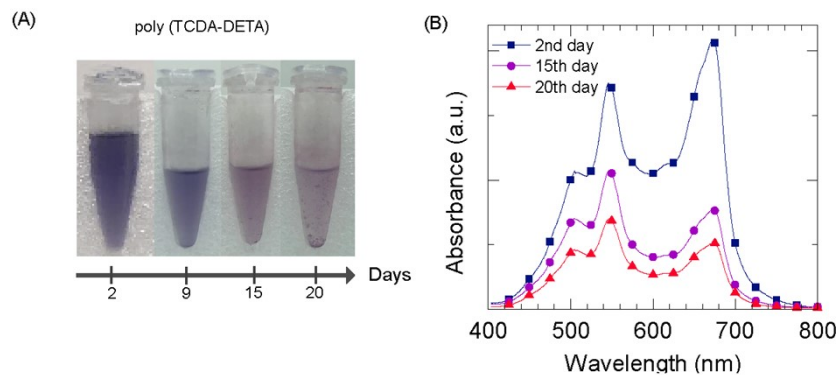


Fig. S8 Photos of poly(TCDA-DETA) vesicle solution captured on different days up to 3 weeks (A); UV-Vis absorption spectra of poly(TCDA-DETA) vesicle solutions recorded on corresponding days (B).

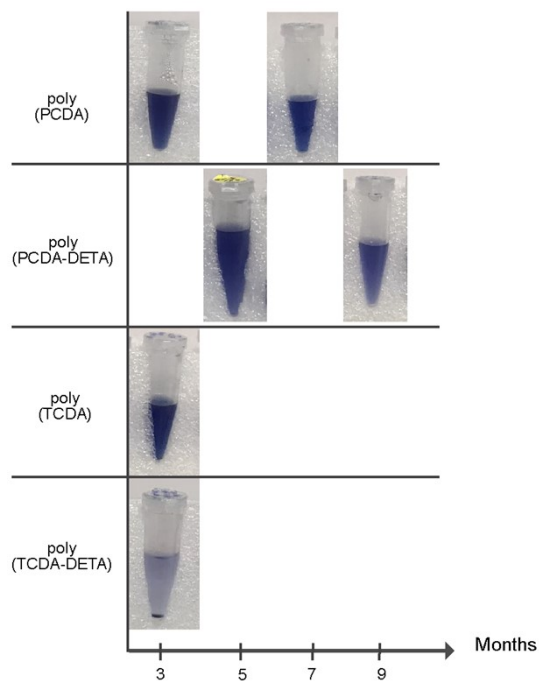


Fig. S9 Photos of polymer vesicle solutions captured months after preparation.